C12N

(21) Int. Application Number: PCT/NL90/00130

(22) Int. Filing Date: 11 September 1990 (11.09.90)

(30) Priority data:
8902301 14 September 1989 NL (14.09.89)

(71) Applicant *(for all designated States except US)*: RIJKSUNIVERSITEIT TE LEIDEN [NL/NL]; Stationsweg 46, NL-2312 AV Leiden (NL).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)* : BROWN, Caroline, Sarah [GB/NL]; Frans van Mierisstraat 85 huis, NL-1071 RM Amsterdam (NL).

(74) Agent: SMULDERS, Th., A., H., J.; Vereenigde Octrooibureaux, Nieuwe Parklaan 107, NL-2587 BP The Hague (NL).

(81) Designated States: AT (European patent), BE (European patent), CH (European patent), DE (European patent)*, DK (European patent), ES (European patent), FR (European patent), GB (European patent), IT (European patent), LU (European patent), NL (European patent), SE (European patent), US.

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
In English translation (filed in Dutch).

(51) International Patent Classification 5 : C12N 15/35, 5/10, C12P 21/02 C12N 15/86, G01N 33/569 A61K 39/23, 39/295

A1

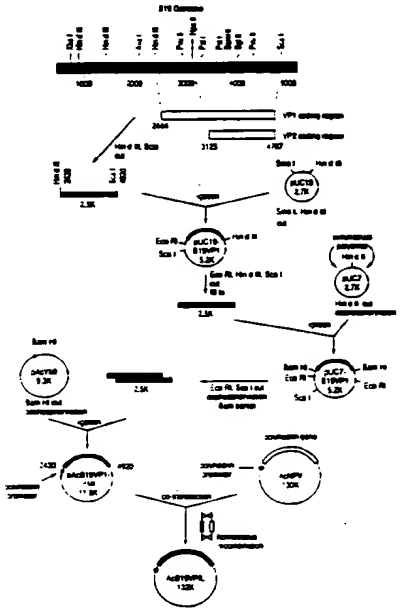
(11) Int. Publication Number: WO 91/04330

(43) Int. Publication Date: 4 April 1991 (04.04.91)

(54) Title: HUMAN PARVOVIRUS B19 PROTEINS AND VIRUS-LIKE PARTICLES, THEIR PRODUCTION AND THEIR USE IN DIAGNOSTIC ASSAYS AND VACCINES

(57) Abstract

The invention relates to the coat proteins VP1 and VP2 of the human parvovirus B19 and virus-like particles consisting of VP2 or of VP1 and VP2. The invention further comprises genetic information in the form of recombinant expression vectors which contain the genes coding for said proteins, and organisms which through genetic manipulation using such vectors have acquired the ability to produce such proteins and/or particles. The invention further comprises uses of such proteins and virus-like particles for diagnostics or vaccination.



(21) Int. Application Number: PCT/FI90/00212

(22) Int. Filing Date: 11 September 1990 (11.09.90)

(30) Priority data:
408,056 15 September 1989 US (15.09.89)

(71) Applicant: GENESIT OY [FI/FI]; Valimotie 7 D, SF-00380 Helsinki (FI).

(72) Inventors: PALVA, Ilkka ; Välitalontie 87 A, SF-00660 Helsinki (FI). HEMILÄ, Harri ; Soittajantie 3 D, SF-00420 Helsinki (FI). PALVA, Tapio ; Drottninggatan 5, S-752 20 Uppsala (SE). SAARILAHTI, Hannu ; Flogstavägen 87 D 1 TR, S-752 63 Uppsala (SE). HEINO, Pekka ; flogstavägen 91 C, S-752 63 Uppasala (SE).

(74) Agent: OY KOLSTER AB; Stora Robertsgatan 23, P.O. Box 148, SF-00121 Helsinki (FI).

(81) Designated States: AT (European patent), AU, BE (European patent), BR, CH (European patent), DE (European patent)*, DK (European patent), ES (European patent), FI, FR (European patent), GB (European patent), HU, IT (European patent), JP, KR, LU (European patent), NL (European patent), SE (European patent), SU.

Published
With international search report.

(51) International Patent Classification 5 : C12N 15/56, 9/24

A1

(11) Int. Publication Number: WO 91/04331

(43) Int. Publication Date: 4 April 1991 (04.04.91)

(54) Title: POLYGALACTURONASE GENE FROM ERWINIA CAROTOVORA AND ITS MOLECULAR CLONING

(57) Abstract

A DNA sequence encoding the enzyme polygalacturonase is provided. The sequence was isolated from *Erwinia carotovora* subsp. *carotovora* and cloned in *Escherichia coli*. The invention relates to vectors, such as plasmids, comprising the sequences of the present invention, and to host cells transformed with such vectors. By means of the invention polygalacturonase can be synthesized in and secreted from host cells. Use of GRAS-status host cells provides polygalacturonase suitable for use in food processing.

* See page 2576